Social and Economic Aspects of Planning
AMS
Additional AMS Considerations

PRESENTER: I'm going to be speaking about, and this slide summarizes, the four kind of key elements of Analysis of the Management Situation from an economic standpoint. So these are issues that need to be addressed by the regional economist or the contractor.

You know, the first one is pretty important on what is the sustainable supply of the renewable resources or the carrying capacity, right? BLM under FLPMA is a multiple use agency. The Federal Land Policy and Management Act requires multiple use and sustained yield. So what is the sustained yield of these resources?

You know, in many cases we may have historic livestock grazing, timber harvest that's greater than sustained yield. And so, in fact, in formulating alternatives, right, the AMS is the foundation for developing alternatives, which is the next step in the planning process. You need to know what the resource capability is so that you do not formulate alternatives in excess of the resource capacity.

Oftentimes the public isn't the issue. We want more waterfowl hunting. We want more livestock grazing. We want more timber harvest. Well, BLM has the responsibility to stay within the sustained yield of the resource capability. So you can't formulate in the next step alternatives that promise more output than the sustained yield of the resource. So that's why knowing something about that is pretty important.

And the other aspect is what is a cost-effective supply? So physically, right, we can go out -- we used to do when I worked for BLM lots of chainings, you know, to increase forage for livestock. Well, it may be technically feasible to increase the supply of forage or waterfowl hunting, but it may not be economically viable to do that. It may cost the agency more than the value of the forage created. Or in some cases, you know, with the chainings, it cost in an opportunity cost to the other multiple use resources. So the damage to archaeological sites, to recreation, to wildlife habitat, knocking down pinion juniper trees to provide more forage in many cases took out winter range in areas that wildlife needed. So we need to think about those resource interactions.

So part of the deal in the AMS is when you're looking at these supply opportunities is to look at the interaction, right? Allocation of forage to wildlife. Allocation of forage to livestock. Allocation of residual forage to minimize erosion on the landscape and to maintain water quality. So those interaction -- this is where -- you know, sort of an interdisciplinary team. So that's the supply side. What is the resource capable of providing.

The flip side, right, is there a demand for that out there? In many cases, BLM may have the capability to supply this resource, but we want to ask, Is there a demand? And is there a demand not just in our study area, right, this multi-county area? As I mentioned before, oftentimes a lot of the demand for the resources in the study area comes from populations living in urban areas that are

hundreds of miles away. So we want to look at human population. We want to look at income. And then we want to do some demand projections. We want to say, What is the demand over time for those resources?

And we want to look at substitutes. You know, when we think about multiple use, not only does that not mean every use on every acre, but multiples across the agency. Not every Field Office has to produce every multiple use. I mean, in some sense, there's comparative advantage. You know, some resource areas are more productive in producing wildlife, some in producing minerals and so forth. So we need to kind of look at this substitution broadly and look at multiple use broadly. Not every multiple use has to be produced in every Field Office area.

There's also substitutes. Not only other BLM lands, but other public lands, and in some cases, other private lands. As I mentioned, the reduction in timber harvesting on federal critical habitat areas in Oregon will be met and was met by more production on private lands and state lands. So do not feel the onus or burden is on, Well, BLM has to supply all of the demand.

So one way to look at this population issue is, you know, look at those county plans. Stewart was talking about looking at what the county and the county demographer and state demographer, what is the population forecast? So this shows, for example, build out of the Grand Junction, Mesa County area. So all that red is basically new population there. So we look and we establish a

relationship, then, and in this slide we've taken historic data to establish a relationship between population and visitor use. And if we know and can statistically estimate a relationship between past visitor use and population and then we go back here and we get the projection of population into the future, we can make forecasts of visitor use out into the future. And this illustrates a linear curve. We can test. It obviously can be curvilinear, quadratic. I mean, that's the nice thing about doing a little statistical forecasting, is you can test to see, Is the future linear? Does it level off at some point in time or not? So using that data on population we can make these forecasts of demand.

Now, sometimes, you know, there are, in fact, already demand estimates that, in fact, agencies make. So, for oil and gas, for example, right, we have the Department of Energy. There are various industry groups that are making these forecasts as well. So, God's sake, use these other experts. And there will be some downscaling, right? They'll have a national demand for oil and gas or natural resources in a particular way. You need to downscale it.

The Forest Service does an outstanding job, these Resource Planning Act assessments that they do every 10 year are a treasure-trove. They have resource by resource by resource. Each multiple use resource, they do a national assessment from all lands, not just Forest Service lands, but BLM, private lands. And those assessments, you know, they do one for water, they do one for range, they do one for timber, I mean, those are very useful documents

for you to get an assessment of what is the long-term demand for those resources. So if, in fact, you have sort of national and international resources, by all means use Department of Energy, use these U.S. Forest Service RPA assessments and so forth.

Now, if you're dealing with very local things, you know, it depends on the nature of the recreation. As we'll see later on this afternoon or tomorrow, some recreation activities, picnicking, is going to be driven by the local population. Mountain biking might be. Small game hunting. Something like big game hunting, whitewater rafting, right, you're going to be drawing people from hundreds of miles away. So you need to look at a bigger sort of market area in that case. So it kind of depends. You may need to do your own trend analysis for recreation. What are some other BLM resources that you can think of that would be driven by local demand? There's one type of a mineral, right? A salable mineral? Sand and gravel, right? That's driven by local housing construction, local road construction. People aren't hauling sand and gravel thousands of miles across the U.S. I mean, that's a very high weight material, very low value material. So BLM in many cases does provide an important part of that local supply, and there's not good substitutes for that. Beef, right, we get beef from Australia. We get beef from Argentina, right? We're not going to run out of Big Macs or Whoppers if we reduce livestock grazing on a particular allotment. There's a national/international market for those resources. But there isn't for things like sand and gravel. I mean, that has to be met locally. So think

about those kind of, What is the market area both in terms of demand and supply?

Same way looking at dependency. So historically BLM has looked at this and said, Well, how much of the local supply comes from BLM lands? So, in this example, 10,000 AUM's are produced in the region. 2,000 AUM's of that comes from BLM land. Now, if that comes at a critical time of year, it may have more than just, right, in this example, 20 percent. The rancher's viability may be more than just, well, 20 percent.

Same way with the mills. If you look at a mill or you look at a processing plant, how much of the demand for the resource comes from BLM versus areas around there?

Now, again, local stuff like off-highway vehicles, you know, in fact, BLM might be one of the only areas out by Walden and Grand County there is a set of sand dunes, and it's like one of the only set of sand dunes in Northern Colorado in that area. So, in fact, it's a resource without many substitutes and that's a critical resource that BLM provides. So you want to look at these things and say, okay, are there substitutes? How dependent is BLM or other resources on this?

In some cases, we need to separate out physical resource dependency versus economic dependency. The ranchers may be -- in this example, you might have

50 percent of the forage coming from BLM lands. However, most of these ranching operations are so small that they do not -- they're not economically dependent on the ranching operation for income. When I worked in Moab, many of the ranchers that lived in Price, their social identity was, well, they were a rancher in the community and their grandfather had been a rancher in the community. How did they support themselves? They worked in the coal mines. Their wives were teachers in the elementary school. They were not economically dependent on BLM lands. A very small fraction of their income was attributable to livestock grazing. So when you're looking at this dependency, separate out resource dependency from economic dependency. Basically a lot of these -- if they've got a hundred head of cattle, livestock grazing is, in fact, is a lifestyle. It's a social and more amenable in many cases to social analysis than it is to economic analysis. Their stature in the community, their sense of place in that community is related to livestock grazing, but it's not from an economic standpoint. They were a coal miner. Their wife was a teacher. And they weren't -- decisions about their economic viability wasn't influenced by BLM livestock grazing decisions. So it's important to make that distinction.

One of the things the AMS does is the future without. In other words, most of these analysis of management situations kind of say, Well, if BLM continues to implement the current RMP, what's going to be these effects, right? What's continuation of existing management? That's the baseline or reference case which once we do in step 6 we're going to be comparing the alternatives that we

estimate against that. So we kind of start to set that foundation here. And many of those things, the techniques that we'll talk about in step 6, then will tie back. So that's why I think John Thompson's comment about the AMS being a living document, yeah, basically at this point you're setting the foundation in step 4. Once the alternatives are formulated in step 5, then in step 6 you're going to estimate those effects. And so some of the same techniques that we'll talk about in step 6 will be used here in this Analysis of the Management Situation.

So let me get caught up here.

So kind of pulling together both the social and the economic, our value is really, I think -- Stewart talks about telling stories, and I think that's where the value is that we provide as analysts and analysis. 400 pages of an appendix is not -- there's no value added there, right? I really try to get this point across to my students as well. You know, data is an input to doing analysis. Analysis is interpretation. What does it mean? Why should I care? So our value added is analyst. This is what you want to get across to the consultant as well. What does it mean? Distill all this data down to some statements about what does it mean and not just undigested -- that's the hazard with the web... you can dump all kind of information out. You can dump stuff into an Excel spreadsheet. You know, that doesn't mean much. You know, your job is, what does it mean? And collaboration with, review by community residents. I mean, you want to get their reaction up front. It will save you a lot of grief in the long run. They're a good

resource, particularly in areas as Roy was mentioning that are changing rapidly. The public statistics are often going to be out of date. So it's important to kind of get a sense.

Now, you also have to realize sometimes there's a little bit of what Tom Power calls the "rear-view mirror mentality." Right? That in fact many of the residents remember what the community was, not what the community is today and where it's going. So you have to take some of this with a grain of salt.

So in the AMS you want to set this foundation. You want to basically get your data collection together. You want to look at the economic forces in the study area. Now, EPS provides a snapshot, if you will, estimating the sustained yield of resources and future demand and local dependency. One of the things to keep in mind is that oftentimes BLM lands are a very small player in the economic forces affecting this study area, right? We talk about globalization. I mean, China, Argentina, Australia, New Zealand, the European Union. I mean, those countries produce a lot of these same products that we produce. They could in some cases produce them more cheaply than we can produce them. So we have to realize that BLM and the Forest Service, the analogy is often pushing on a string. You're not an economic development agency and you're not responsible for the economic viability of that community, and in many cases your supply decisions about resources -- I mean, this is classic with the Forest Service. Think about it right now with the housing slump. Will offering more

timber sales and more timber increase logging employment and keep the mills running? There's no demand for it, right? Very little housing construction going on. That's an exogenous force that affects these local communities. So part of the AMS is to kind of paint the picture of the community and the community's economy in this larger sort of national or international and say, yeah, you know, in some cases you're getting beat up and the economy is not doing well, and BLM is not Superman. It can't come to the rescue here because the levers that BLM has to pull in many cases with their resource management decision are limited. And in fact have limited effectiveness in many cases because it's interest rates set by the Federal Reserve Bank that influences housing and the lending policies that influence housing that drive the demand for these resources. So I think that's important to sort of keep these things in mind.

From the social side, who and what is affected by these plans? So, this is where we bring in those distributional issues in many cases. This is where things like environmental justice would come into play. We want to know in some cases who are the people by income class, race, ethnicity, you know, those sorts of things. And while some of this information is in the census and things like that, be aware that it can be out of date. And go after things like quality of life and community resiliency and those sorts of things. I mean, in many cases I often kid people, economics is a Trojan horse. Lots of times people claim these are economic issues with wilderness designation or Wild and Scenic River designation, you know, and in fact they're really not economic issues. They're

social issues and they masquerade sometimes as economic issues, and a good social scientist will kind of poke and prod and see that, Well, you know, this really -- you know, whether -- the studies that have been done have shown wilderness designation does not harm communities. Some cases, it enhances them. In a lot of cases it does no harm. And the opposition to wilderness may, in fact, be a social kind of issue, a concern about quality of life or community resiliency, and so you need -- this is an opportunity to sort of dig deeper.

And think about primary data collection. I mean, in many cases you may find existing data throughout. I think this Interior Columbia Basin, for example, is very useful. It's starting to get kind of dated and so you may need to do some of your own data collection.

With that, I think Joan is going to come up --

PRESENTER: We'll probably break for lunch, but before we do that, do we have any questions or comments on the material that John presented or anybody else presented this morning? Question over here.

CLASS PARTICIPANT: You just mentioned at the very end there about how often that opposition -- I think kind of what you're getting at, opposition to a certain thing that BLM is proposing is couched in economic terms when really it's often not. How do you address that when comments are coming in saying, You're going to put an economic hardship on us?

PRESENTER: Right. So, I mean, the issue of -- these issues are often portrayed as economic issues. We're all going to freeze to death in the dark. You're going to put us out of business. One of my favorite ones on livestock grazing is raising the fee is going to put us out of business. Yet, as we saw from these other ones, livestock grazing is the economic foundation of this community. Okay, now, wait a minute, both of those statements can't be true. So go to EPS, right, and look at this. What percentage of the county income, right? So I think that exercise that Roy kind of led you through comparing the two counties. So EPS is a really good start to say, Okay, look, livestock is socially important. That's the identity of the community in many cases. That's the social identity of a lot of these ranchers. As a percentage of county income it's trivial. I mean, it isn't Grand County. It isn't Mesa County. You want to do in that a very -- in a nonconfrontational way, but you want to say, Gee, now -- and you can do it in a way to solicit -- Is there something we're missing here? So the statistics suggest that only in some cases three percent, one percent, five percent -- you know, it's one of the smallest sectors and -- and this has what we would call a very high leakage. In most of these areas, the cattle get shipped out for processing. There's not even any linkages in terms of, Well, there's a meat processing plant in town. But then I think you could ask -- say, Are we missing something? Is that statistic -- why do you think -- is that accurate? If it's not accurate, why don't you think it's accurate? Then the social issues -- the classic is this open space issue, cows versus condos. And the idea there, that's a failure to distinguish the means from the end, right? So the rancher is going, Well, look, if I don't have a viable

operation, I'm going to sell, it's going to be in condos. Well, if we want to keep that in open space, we have other tools. We have conservation easements. We have zoning. Right? So we're not forced into a, Well, you better subsidize and give me all the AUM's I want or I'm going to subdivide. Well, wait a minute. You know, if we want to keep this as open space, which they're doing out in Routt County in Steamboat, they're doing between -- in the Gunnison Valley between Gunnison and Crested Butte, they've worked with the ranchers and they've done, as I say, conservation easements. They've done zoning. There's lots of tools. So I guess that will be maybe one other take-home message from this course, in some cases being able to step back and saying, Well, is it an economic issue? It may be a social issue. And it may be that we share a common goal or end and we're just [inaudible] livestock grazing is one way. That might be a really expensive way to get to the other resources compared to conservation easements or zoning or those sorts of things. Does that --

CLASS PARTICIPANT: Oh, yeah.

PRESENTER: Sometimes you have to tell me to stop.

CLASS PARTICIPANT: No, no, that's good.

CLASS PARTICIPANT: Do you actually crunch the numbers in the IMPLAN right now, the current management, or can you wait until the following steps?

Because if you did it now, you know, by the time that the actual alternatives are ready, it could be two years down the road and then this is all --

PRESENTER: Right. What I do is I do them at this point in the AMS, and the reason that I do it is getting back to what we talked about yesterday when we have this economic -- community economic workshop, I want to know what the local contribution of BLM is to the local economy, and if I -- if I just run IMPLAN for current managements and FEAST, I get that information. Then I redo it again when the alternatives are developed.